

US EPA ARCHIVE DOCUMENT

ATTACHMENT D: INJECTION WELL PLUGGING PLAN

Facility Name: FutureGen 2.0 Morgan County CO₂ Storage Site
IL-137-6A-0003 (Well #3)

Facility Contacts: Kenneth Humphreys, Chief Executive Officer,
FutureGen Industrial Alliance, Inc., Morgan County Office,
73 Central Park Plaza East, Jacksonville, IL 62650, 217-243-8215

Location of Injection Well: Morgan County, IL; 26–16N–9W; 39.80097°N and 90.07544°W

The FutureGen Alliance shall comply with the reporting and notification provisions in 40 CFR 146.92.

Immediately Prior to Well Plugging:

Per the requirements at 40 CFR 146.92, The FutureGen Alliance must:

1. Flush each injection well with a buffer fluid;
2. Determine the bottomhole reservoir pressure using methods and procedures identified in Attachment C – Testing and Monitoring Plan; and
3. Demonstrate external mechanical integrity using methods and procedures identified in Attachment C – Testing and Monitoring Plan.

Information on Plugs:

Cementing to Plug and Abandon Data	Plug #1	Plug #2	Plug #3	Plug #4	Plug #5	Plug #6	Plug #7
Diameter of Boring in Which Plug Will Be Placed (in)	7	7	7	7	7	7	
Depth to Bottom of Tubing or Drill Pipe (MD) (ft)	6,004 or 7,004 ^(a)	3,900	3,100	1,800	1,500	700	
Sacks of Cement to Be Used (each plug) (sks)	451 or 665 ^(a)	149	0	53	0	124	
Slurry Volume to Be Pumped (ft ³)	505 or 745 ^(a)	167	271	63	167	146	
Slurry Weight (lb/ft ³)	15.8	15.8	8.6	15.6	8.6	15.6	
Top of Plug (MD) (ft)	3,900	3,100	1,800	1,500	700	0	
Bottom of Plug (MD) (ft)	6,004 or 7,004 ^(a)	3,900	3,100	1,800	1,500	700	
Type of Cement or Other Material	EverCrete	EverCrete	6% Gel	Class A	6% Gel	Class A	
Method of Emplacement (e.g., balance method, retainer method, or two-plug method)	Balance Method						
(a) This value applies to injection wells completed with a 2,500 ft lateral. MD = measured depth.							

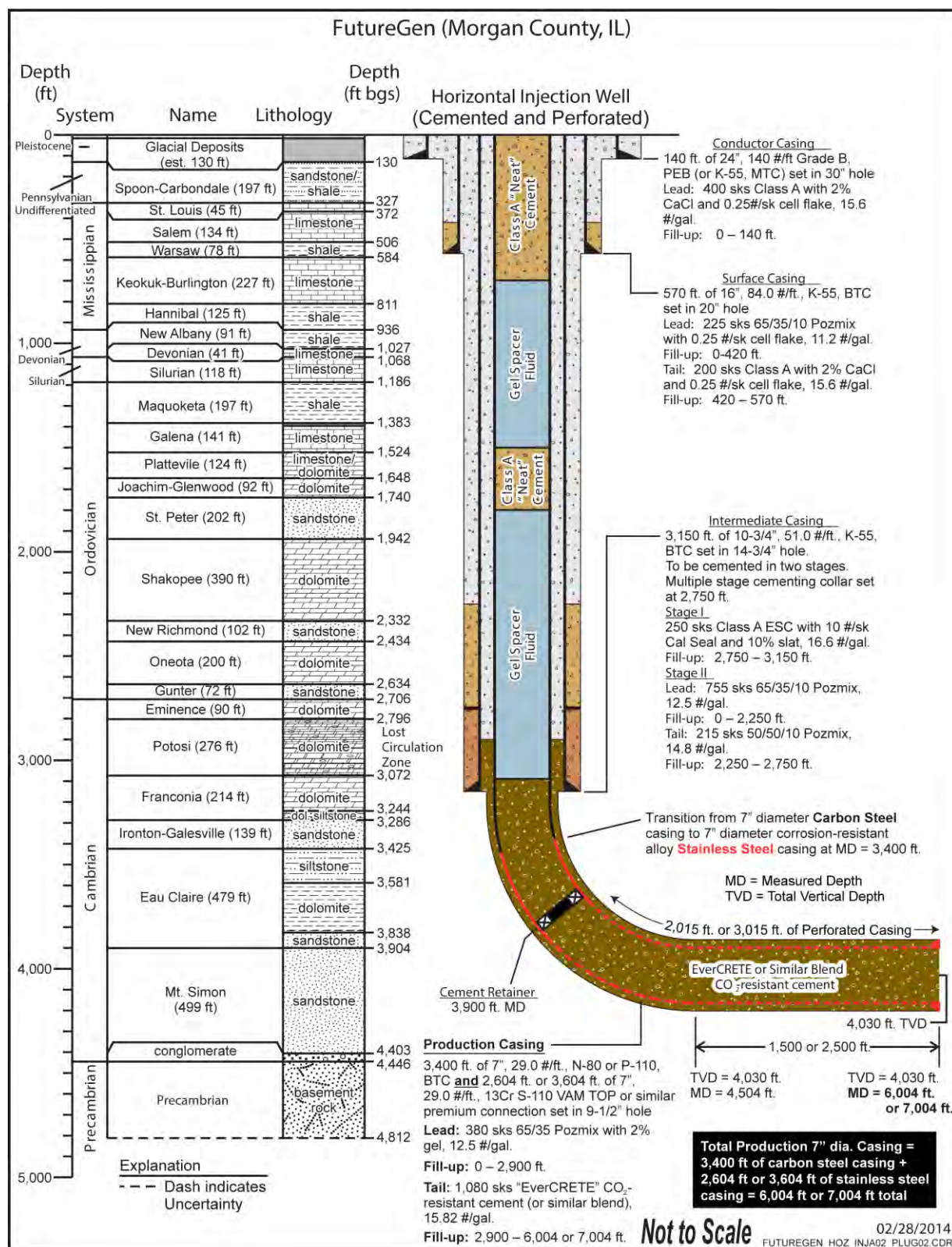


Figure 1. Diagram of Injection Well after Plugging and Abandonment (geology and depths shown in this diagram are based on site-specific characterization data obtained from the FutureGen 2.0 Stratigraphic Well).

United States Environmental Protection Agency Washington, DC 20460																																																																	
PLUGGING AND ABANDONMENT PLAN																																																																	
Name and Address of Facility Morgan County Class VI UIC Well #3 (cased well completion, 2,500 ft lateral) [address not yet available]																																																																	
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Locate Well and Outline Unit on Section Plat - 640 Acres <div style="text-align: center;">N S</div>	State Illinois County Morgan Permit Number not yet issued																																																																
Surface Location Description SE 1/4 of SE 1/4 of SW 1/4 of SE 1/4 of Section 26 Township 16N Range 9W Locate well in two directions from nearest lines of quarter section and drilling unit Surface Location <input type="text"/> ft. from (N/S) <input type="text"/> Line of quarter section and <input type="text"/> ft. from (E/W) <input type="text"/> Line of quarter section.																																																																	
TYPE OF AUTHORIZATION <input checked="" type="checkbox"/> Individual Permit <input type="checkbox"/> Area Permit <input type="checkbox"/> Rule Number of Wells <input type="text" value="1"/> Lease Name <input type="text"/>																																																																	
WELL ACTIVITY <input type="checkbox"/> CLASS I <input type="checkbox"/> CLASS II <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage <input type="checkbox"/> CLASS III Well Number <input type="text"/>																																																																	
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Certification I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)																																																																	
Name and Official Title (Please type or print) Kenneth K. Humphreys, Chief Executive Officer	Signature Date Signed 03/03/2014																																																																

EPA Form 7520-14 (Rev. 12-11)